

P2 PROJECTS – Sustainable Design

CHRONOLOGICAL ORDER

Successes:

- 2002 – The Aero-Acoustical Propulsion Laboratory converted from **JP-8** (a kerosene-based fuel used by the military and commercial airlines) to **CNG** because of odor complaints from surrounding buildings. CNG burns cleaner and with fewer emissions than JP-8. Involved: Todd Strawser.

- July 2003 – **Biodiesel study**: 30,000 gallons have been delivered since January 2003. GRC is using 20% biodiesel, made from soybeans, in all diesel vehicles, stationary diesel fuel storage tanks, and equipment using these tanks, such as electrical generators. Involved: Todd Strawser.

- July 2003: Conversion to **Ethanol (E85)** – GRC has fifteen+ vehicles that are E85 compatible (85% ethanol, 15% gasoline). Equipment needed to retrofit gas dispensers has been received and installed. Involved: Todd Strawser.

- July 2003: 38 GRC **vehicles use CNG**: shuttle busses, cargo vans, passenger vans, pick-up trucks, and passenger cars. CNG burns cleaner and with fewer emissions than gasoline. Involved: Todd Strawser.

- July 2003: **Groundskeeping – Day Care Center** - 1) The new center needed an environmentally preferable solution to a weed/bee problem. An organic lawn care company suggested a **nontoxic lemon juice/vinegar herbicide**. 2) We had also searched for a **non-chemically-treated sod** (never found one) to use if the children need to move in before the grass grows, but it turned out sod will most likely not be needed. 3) Also, the **mulch** being used was **recycled human waste**. The mulch is a good biobased, recycled alternative, and should be used in other areas; but it was deemed inappropriate for Day Care use. (See also hazardous chemical replacement.) Involved: Linda Sekura.

- September 2003: Plum Brook has **recycled steel** from defunct boilers.- Summer 2003: **Complete propane-to-methane (CNG) towmotor study and issue report**: A local rep for NESC Williams will schedule a one-month demo (installing at their cost), converting one towmotor, to reduce indoor emissions for workers. Involved: Todd Strawser.

- July 2003: **Groundskeeping** – We are looking into possibly replacing ChemLawn practices with an organic lawn care company. One company uses a nontoxic sugar beet protein herbicide. 8-21 Good Nature organic lawn care company came in to look at entire 350 acres, and especially the Day Care area. They will submit a quote for possibly

replacing ChemLawn for seasonal lawn treatments. Involved: Don Musick, Bonnie Hassel, Rich Olinek.

- July 2003: The groundskeeping staff currently performs mowing only, with **bee spraying** only upon request. We are reviewing GRC's bee spraying chemicals, and will submit suggestions for alternatives. Involved: Don Musick, Bonnie Hassel, Rich Olinek.

- November 2003: GRC will be negotiation with First Energy (FE) to provide a certain percentage of **wind or other alternative power**. Quyen Quach is part of the FE contract negotiation team. Fletcher Miller forwarded a website to Quyen about wind power in PA. She is looking into that to see if FE has any part in it. If yes, then we will request FE to provide a certain percentage of electricity using this wind power without additional cost to us in our next re-negotiation. GRC's current contract will expire December 2004, so we are planning a kickoff meeting w/ FirstEnergy sometime in late January 2004 to start a negotiation process which may take several months to reach agreement. Involved: Quyen Quach, Fletcher Miller.

Linda Sekura X3-5693
1-19-2004 updated.